

Amendments to the Claims:

Claims 1-4 (Canceled)

5. (Currently amended) A pharmaceutical composition having a pH of about 3.0 to about 5.0 and comprising interferon-beta (IFN- β), wherein said composition is prepared by a method comprising the steps of:

- a) denaturing IFN- β with guanidine hydrochloride (HCl);
- b) renaturing the IFN- β via dilution into a first buffer to obtain a renatured IFN- β solution comprising residual guanidine HCl; and
- c) removing said residual guanidine HCl from said renatured IFN- β solution by diafiltration or dialysis of said renatured IFN- β solution into a second buffer that is pharmaceutically acceptable, wherein said second buffer is selected from the group consisting of glycine, aspartic acid, and sodium succinate.

6. (Previously presented) The pharmaceutical composition of claim 5, wherein said first buffer has a pH of about 3.0 to about 5.0, and wherein said residual guanidine HCl is present in said renatured IFN- β solution at a concentration of 1.6 M or less.

7. (Previously presented) The pharmaceutical composition of claim 6, wherein said first buffer has a pH of about 3.0 to about 4.0, and wherein said residual guanidine HCl is present in said renatured IFN- β solution at a concentration of 0.2 M or less.

8. (Previously presented) The pharmaceutical composition of claim 7, wherein said first buffer has a pH of about 3.0, and wherein said residual guanidine HCl is present in said renatured IFN- β solution at a concentration of 0.1 M or less.

9. (Previously presented) The pharmaceutical composition of claim 5, wherein said composition comprises substantially monomeric IFN- β .

Claims 10-12 (canceled)

13. (Currently amended) A pharmaceutical composition having a pH of about 3.0 to about 5.0 and comprising interferon-beta (IFN- β), wherein said composition is prepared by a method comprising the steps of:

- a) obtaining a sample comprising substantially purified IFN- β ;
- b) mixing said sample with guanidine hydrochloride (HCl) to obtain a first solution comprising solubilized denatured IFN- β ;
- c) diluting said first solution into a first buffer to obtain a second solution comprising solubilized renatured IFN-beta and residual guanidine HCl; and
- d) removing residual guanidine HCl from said second solution by diafiltration or dialysis of said second solution into a second buffer that is pharmaceutically acceptable, wherein said second buffer is selected from the group consisting of glycine, aspartic acid, and sodium succinate.

14. (Previously presented) The pharmaceutical composition of claim 13, wherein said composition comprises substantially monomeric IFN- β .

15. (Previously presented) The pharmaceutical composition of claim 13, wherein said first buffer has a pH of about 3.0 to about 5.0, and wherein said residual guanidine HCl is present in said second solution at a concentration of 1.6 M or less.

16. (Previously presented) The pharmaceutical composition of claim 15, wherein said first buffer has a pH of about 3.0 to about 4.0, and wherein said residual guanidine HCl is present in said second solution at a concentration of 0.2 M or less.

17. (Previously presented) The pharmaceutical composition of claim 16, wherein said first buffer has a pH of about 3.0, and wherein said residual guanidine HCl is present in said second solution at a concentration of 0.1 M or less.

Claim 18. (canceled)

19. (Currently amended) ~~The composition of claim 18 wherein said buffer solution has~~
A composition comprising substantially monomeric interferon-beta (IFN- β) and having a pH of
about 3.0 to about 5.0, wherein said composition is prepared by a method comprising the steps
of:

_____ a) preparing a sample comprising substantially purified IFN- β ;
_____ b) mixing said sample with guanidine hydrochloride (HCl) to obtain a first
solution comprising solubilized denatured IFN- β ; and
_____ c) renaturing said IFN- β by dilution of said first solution with a buffer,
wherein said buffer ~~solution~~ has a pH of about 3.0 to about 5.0 and is selected from the group
consisting of glycine, aspartic acid, and sodium succinate.

20. (Currently amended) A pharmaceutical composition comprising the composition of
claim ~~18~~19.

Claims 21-25 (Canceled)

26. (Previously presented) The pharmaceutical composition of claim 5, wherein said IFN- β has the amino acid sequence set forth in SEQ ID NO:1 or SEQ ID NO:2.

27. (Previously presented) The pharmaceutical composition of claim 5, wherein said IFN- β is glycosylated or unglycosylated.

28. (Previously presented) The pharmaceutical composition of claim 5, wherein said IFN- β is recombinantly produced.

29. (Previously presented) The pharmaceutical composition of claim 5, wherein said IFN- β has at least 80% amino acid sequence identity with the amino acid sequence set forth in SEQ ID NO:1 as calculated using the ALIGN program with a PAM 120 weight residue table, a gap length penalty of 12, and a gap penalty of 4.

30. (Previously presented) The pharmaceutical composition of claim 5, wherein said composition is injectable.

31. (Previously presented) The pharmaceutical composition of claim 13, wherein said IFN- β has the amino acid sequence set forth in SEQ ID NO:1 or SEQ ID NO:2.

32. (Previously presented) The pharmaceutical composition of claim 13, wherein said IFN- β is glycosylated or unglycosylated.

33. (Previously presented) The pharmaceutical composition of claim 13, wherein said IFN- β is recombinantly produced.

34. (Previously presented) The pharmaceutical composition of claim 13, wherein said IFN- β has at least 80% amino acid sequence identity with the amino acid sequence set forth in SEQ ID NO:1 as calculated using the ALIGN program with a PAM 120 weight residue table, a gap length penalty of 12, and a gap penalty of 4.

35. (Previously presented) The pharmaceutical composition of claim 13, wherein said composition is injectable.

36. (New) The composition of claim 5, wherein said first buffer is selected from the group consisting of glycine, aspartic acid, and sodium succinate.

37. (New) The composition of claim 13, wherein said first buffer is selected from the group consisting of glycine, aspartic acid, and sodium succinate.

38. (New) The composition of claim 19, wherein said IFN- β has the amino acid sequence set forth in SEQ ID NO:1 or SEQ ID NO:2.

39. (New) The composition of claim 19, wherein said IFN- β is glycosylated or unglycosylated.

40. (New) The composition of claim 19, wherein said IFN- β is recombinantly produced.

41. (New) The composition of claim 19, wherein said IFN- β has at least 80% amino acid sequence identity with the amino acid sequence set forth in SEQ ID NO:1 as calculated using the ALIGN program with a PAM 120 weight residue table, a gap length penalty of 12, and a gap penalty of 4.

42. (New) A pharmaceutical composition having a pH of about 3.0 to about 5.0 and comprising interferon-beta (IFN- β), wherein said composition is prepared by a method comprising the steps of:

- a) denaturing IFN- β with guanidine hydrochloride (HCl);
- b) renaturing the IFN- β via dilution into a first buffer to obtain a renatured IFN- β solution comprising residual guanidine HCl, wherein said first buffer has a pH of about 3.0 to about 5.0 and is selected from the group consisting of glycine, aspartic acid, and sodium succinate; and

c) removing said residual guanidine HCl from said renatured IFN- β solution by diafiltration or dialysis of said renatured IFN- β solution into a second buffer that is pharmaceutically acceptable, wherein said second buffer is selected from the group consisting of glycine, aspartic acid, and sodium succinate.

43. (New) The pharmaceutical composition of claim 42, wherein said composition comprises substantially monomeric IFN- β .

44. (New) The pharmaceutical composition of claim 42, wherein said first buffer is glycine.

45. (New) The pharmaceutical composition of claim 44, wherein said second buffer is aspartic acid.

46. (New) The pharmaceutical composition of claim 42, wherein said IFN- β has the amino acid sequence set forth in SEQ ID NO:1 or SEQ ID NO:2.

47. (New) The pharmaceutical composition of claim 42, wherein said IFN- β is glycosylated or unglycosylated.

48. (New) The pharmaceutical composition of claim 42, wherein said IFN- β is recombinantly produced.

49. (New) The pharmaceutical composition of claim 42, wherein said IFN- β has at least 80% amino acid sequence identity with the amino acid sequence set forth in SEQ ID NO:1 as calculated using the ALIGN program with a PAM 120 weight residue table, a gap length penalty of 12, and a gap penalty of 4.